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UGANDA'S PROGRESS TOWARDS POVERTY REDUCTION DURING THE LAST DECADE 2002/3-2012/13: IS THE GAP BETWEEN LEADING AND LAGGING AREAS WIDENING OR NARROWING?

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Any enquiries can be addressed in writing to the Executive Director on the following address:

Economic Policy Research Centre
Plot 51, Pool Road, Makerere University Campus
P.O. Box 7841, Kampala, Uganda
Tel: +256-414-541023/4
Fax: +256-414-541022
Email: eprc@eprc.or.ug
Web: www.eprc.or.ug

ABSTRACT

Using repeated cross-sectional household survey data, this paper reveals that Uganda sustained the growth in improvements in average living standards during the last decade albeit with persistent regional disparities. In the recent past, the national poverty significantly declined from 24.5 percent in 2009/10 to 20.7 percent in 2012/13, driven mainly by improvements in the distribution of income rather than the increase in the average living standards. Despite progress in welfare improvement at national level, poverty reduction remained unchanged in the lagging areas—notably Northern and Eastern Uganda; and growing in urban areas. In terms of income distribution, the rising inequality since 2002/3 was interrupted by significant improvements in the distribution of incomes between 2009/10 to 2012/13. Indeed, the growth in this period benefitted the poor.

From a policy perspective Uganda suffers from a twin problem of sustaining growth as well as maintaining the poverty reduction momentum. Poverty reduction was significant in the leading regions and remained unchanged in the lagging ones. Accordingly, the progress in poverty reduction continues to widen and the tendencies towards higher inequality seem to undermine the rise in the average living standards. The failure to sustain growth in the lagging regions amidst several government anti-poverty interventions raises policy challenges.

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1. INTRODUCTION

In 2010 Uganda was recognized as one of the few Sub-African countries that managed to attain the global target of halving the proportion of the poor persons earlier than 2015. Poverty reduced from 56 percent in 1992/93 to 24.5 percent by 2009/10 (Uganda Bureau of Statistics (UBoS) 2010). However, although the millennium development goal (MDG) target was achieved in 2009/10, recent assessments based on the Uganda National Panel Surveys show a worsening stance in other measures of living standards. For instance, Ssewanyana & Kasirye (2013) show an increases in the incidence of chronic poverty during 2009/10—2010/11 as well as growing vulnerability to poverty. The reversal was partly attributed to unfavorable economic conditions - driven by both external factors (such as fall in commodity prices) and internal factors (such as high food and fuel prices, and drought among others). These factors have to a great extent impacted on Uganda's economic growth. Yet, the same studies have demonstrated that growth remains key to Uganda's poverty reduction efforts. And that the observed rising inequality is likely to scale back such efforts. The above unfolding events threaten Uganda's progress towards sustaining poverty reduction and in particular prosperity for all as articulated in its Vision 2040 (Government of Uganda (GoU) 2014). There is need to critically review the extent to which the performance at the macro level has impacted on the living standards of all Ugandans as well as the possible drivers of poverty reduction. This also includes the extent of regional disparities. This study is timely given the recent availability of the fifth nationally representative household survey 2012/13 by UBoS (UNHS V)—which could be used to enrich the analysis. However, focusing the analysis only on the period 2009/10 - 2012/13 might not provide insights into the long term linkages between the macroeconomic performance and progress in poverty reduction. As such, the current analysis spans the period 2002/3 to 2012/13 with detailed analysis for the period 2009/10-2012/13.

Uganda's real GDP growth averaged 6.9 percent during 2002/3-2010/13 and this pace was slower than the average growth rates of more than 8 percent registered during the 1990s. Figure A 1 reveals that in 2005/6, real GDP reached its peak (10.8 percent) and thereafter started declining and reached its lowest level of 3.4 percent in 2011/12. Indeed, the contraction of the Ugandan economy seem to have started prior to the 2008 global financial crisis. At sectoral level, the agricultural sector recorded the lowest growth—averaging 1.4 percent per annum during 2005/6-2011/12 compared to average growth of 7.7 percent and 8.3 percent for services and industry respectively. This represents a dismal performance in a sector where the majority of Ugandan still derive their livelihood.

To provide a coherent link between the changes in poverty and GDP growth, the paper divides the period of analysis into three distinct sub-periods[1]: 2002/3-2005/6, 2005/6-2009/10, and 2009/10 – 2012/13 (hereinafter 2003-06, 2006-10 and 2010-13 respectively).Uganda's economic performance varied across these sub-periods (see Table A 1), with the lowest growth registered in the 2009/10-2012/13 period. The growth in this period was lower than the average for the entire period. Other notable changes

1 The sub-periods divided based on the household survey round to ease linkage with macroeconomic performance.

in this same period include: government's shift from poverty to development focus (GoU 2010) and from public spending on social sectors to productive sectors as road infrastructure(MoFPED 2012, 2013) such as infrastructure and energy, among others; inflationary pressure as depicted in Figure A 2, Office of the Prime Minister corruption scandals and overall worsening economic conditions, among others. Yet, the period 2005/6-2009/10 witnessed the restoration of peace in the northern region and parts of eastern region; and the global financial crisis (Ssewanyana & Bategeka 2010; Ssewanyana *et al.* 2009), among others. All these changes are likely to have had different impacts on the government's anti-poverty reduction efforts.

The rest of the paper is structured as follows: The next section provides a snapshot of the data and methods employed. Section 3 discusses the results followed by a discussion of the poverty trends focusing on the 2009/10-2012/13 period in section 4. Section 5 concludes.

2. DATA AND METHODS

2.1 Data

The analysis is based on four rounds of nationally representative survey data collected by UBoS. These are cross-sectional data spanning a ten year period from 2002/3 to 2012/13 – with an interval of three-four years in-between surveys. Each of these surveys were conducted over a period of 12 months. The surveys share a similar sampling frame and survey instruments[2] (see, UBoS Socio-economic Survey Reports, several). In terms of survey timing, UNHS V was conducted from June 2012 to June 2013 whereas the other rounds were conducted from May to April.

2.2 Measuring poverty

Following previous studies examining welfare status in developing countries (see Deaton 1997), household consumption expenditure is selected as the preferred welfare measure and is considered as a proxy for permanent income. Similar methodological approach was followed in the construction of consumption aggregate- based on the consumption expenditure - for all the survey rounds (for details, see Ssewanyana & Kasirye 2010, Ssewanyana & Okidi 2007; Appleton & Ssewanyana 2003).

The consumption aggregate is adjusted for spatial and inter-temporal price variations plus a revaluation of consumption out of home produce from on-farm to market prices. The official consumer price index (CPI) is used to adjust the consumption aggregate into 2005/6 prices. To make poverty comparison across households with different household size and composition in terms of sex and age, the consumption aggregate is adjusted using the World Health Organization's adult equivalence scale(see Appleton 2001, for the calculation of per adult equivalent scales for the Ugandan households). The adjusted household size is then used to generate consumption expenditure per adult equivalent as the welfare measure for

2 However, there are notable changes in the survey instruments that are expected to happen in terms of data collection improvements– such as new consumption items or split of the collection of data on a given item according to its different forms, e.g. groundnuts in paste and grounded form or further disaggregation of broad categories such as clothing into new and old.

generating the widely quoted Uganda poverty statistics.

The poverty estimates are based on the comparisons of the consumption expenditure per adult equivalent with the official absolute poverty line. Uganda's official poverty line is equivalent to $1 per day per person (see Appleton 2001). The standard Foster-Greer-Thorbecke class of poverty indexes that incorporate the three most commonly used poverty measures – poverty headcount ratio (P0), poverty gap (P1) and the square poverty gap (P2)[3] (see Foster *et al.* 1984) are estimated. The poverty estimates for the most recent survey i.e.. the 2012/13 survey round are constructed by the authors. For the previous survey rounds, the paper adopts the official poverty estimates from the previous poverty studies (Ssewanyana & Kasirye 2010, 2013, Ssewanyana & Okidi 2007; Appleton & Ssewanyana 2003). Throughout this paper, analysis is done at individual level, unless otherwise stated. The estimates are weighted to reflect the entire population. To evaluate poverty trends, the 2012/13 poverty estimates are compared with those of the earlier surveys.

The paper also examines the robustness of the observed poverty trends by drawing on the theory of stochastic dominance. The paper adopts the methodology proposed by Ravallion (2004) and Ravallion and Chen (2003) to measure the extent to which growth was pro-poor – through growth incidence curves and the rate of pro-poor. In addition, it uses the Datt & Ravallion (1992) decomposition methodology to distinguish between growth and redistribution components of poverty changes separately for the above sub-periods and for the entire decade.

3. RESULTS AND DISCUSSION

3.1 Changes in consumption expenditure patterns

Consumption expenditure per household: This section provides insights into changes in household consumption expenditure patterns. Table 1 presents the monthly household consumption expenditure per household. The consumption expenditure per household in 2012/13 of Shs262,415 was higher than Shs232,738 registered in 2009/10, representing an annualised growth rate of 3.9 percent (see Figure 1). Figure 1 further reveals that this growth rate is about twice as high as that observed in the period 2005/6-2009/10 of 2.5 percent. The most recent trends are driven by the rather stronger growth in consumption among the rural population in the central region (3.1 percent) and in the western region of 7.7 percent in 2010-13 period. Based on geographical location, the growth in per household consumption expenditure was almost similar in the northern and eastern regions and least in Kampala at 1.4 percent. Notably, the mean consumption in urban areas remained unchanged in 2012/13 and 2009/10 (Table 1). Specifically, Figure 1 reveals that urban areas in the northern region registered negative growth of 2.5 percent in the 2009/10-2012/13 period relative to a positive annualised growth rate of 6.6

3 The P0 indicator is "headcount ratio", the percentage of individuals estimated to be living in households with real private consumption expenditure per adult equivalent below the poverty line for their region; The P1 indicator is the "poverty gap". This is the sum over all individuals of the shortfall of their real private consumption per adult equivalent and the poverty line divided by the poverty line; The P2 indicator is the "squared poverty gap". This is the sum over all individuals of the square of the shortfall of their real private consumption per adult equivalent and the poverty line divided by the poverty line.

percent in the 2005/6-2009/10 period. For the entire period, consumption grew at national level, on average, by 3.6 percent with stronger growth in rural areas (4.5 percent) that was more than three-fold that of urban areas (1.3 percent) - Figure 1. From a policy perspective, the current levels of income and growth rate are not sufficient to enable households to attain the government's income target of Shs20 million per household (MoFPED 2007).

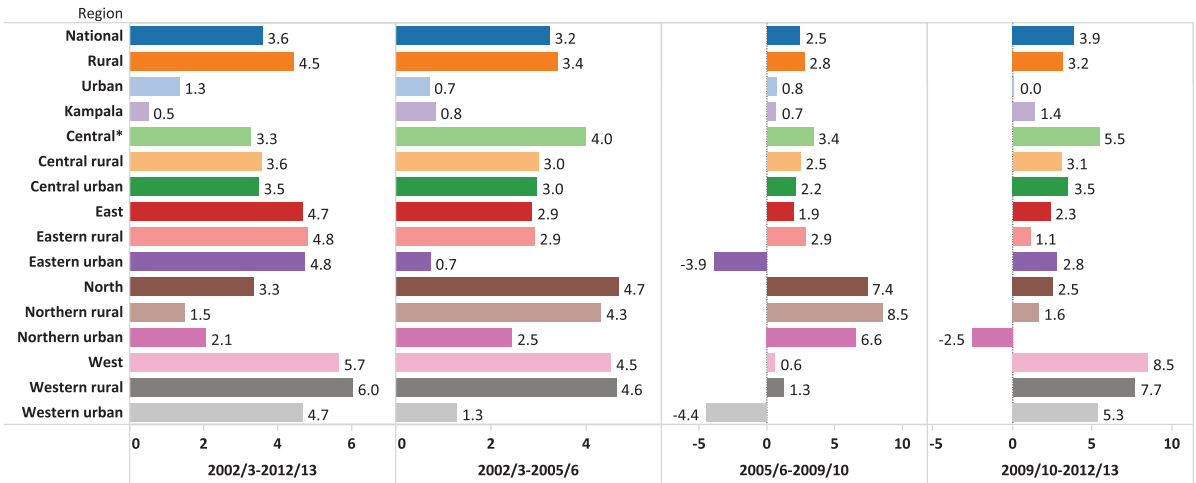
Consumption expenditure per capita: Considering mean consumption expenditure in per capita terms, the first row of Table 3 shows that monthly nominal incomes increased from Shs72,252 in 2012/13 to Shs115,055 in 2009/10 - representing a nominal increase of 59.2 percent between the surveys. Indeed, this implies a real rise in consumption since the CPI rose by 39.8 percent during the same period (similar to the inter-survey inflation). Per capita con-

Table 1: Monthly consumption expenditure per household, Shs (in 2005/6 prices)

	2002/3			2005/6			2009/10			2012/13		
Location	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Uganda	154,499	357,869	189,243	176,617	372,579	210,787	197,526	384,385	232,738	217,922	384,705	262,415
Kampala		455,918	455,918		462,558	462,558		475,505	475,505		496,747	496,730
Central	210,122	345,213	230,080	233,825	383,501	253,826	258,467	418,207	291,253	284,352	465,980	344,643
Eastern	144,126	255,085	155,430	166,574	294,215	178,943	187,065	251,991	193,412	193,465	274,774	207,944
Northern	92,970	196,284	101,064	97,264	208,868	111,739	136,873	271,547	150,211	143,954	251,370	162,399
Western	159,804	296,796	173,098	191,561	341,663	205,270	201,426	286,419	210,488	255,257	337,817	273,685

Notes: (a) Estimates are as reported by households but adjusted for inter-temporal price variations (inflation); (b) Central* excludes Kampala

Figure 1: Annualised growth rates – consumption per household, % (in 2005/6 prices)



sumption registered an annualised growth rate of 15.1 percent, in nominal terms. Deflating the nominal consumption expenditure by CPI (Table 2), results in an increase in per capita consumption from Shs47,184 in 2009/10 to Shs54,664 in 2012/13, representing a real increase of 15.9 percent. The western region registered the greatest real increase of 35.3 percent from Sh42,163 to Shs57,053 and Kampala the least real increase of 10.9 percent from Shs131,618 to Shs145,925 respectively. Broadly speaking, urban areas registered a negative change in real per capita consumption driven by urban areas in the northern and western regions. The annualised growth rates are presented in Figure 2. Positive growth in consumption is noted for the entire decade with the northern region registering stronger growth (of 4.9 percent) than the eastern region (3.1 percent). Considering the sub-periods, the overall growth in urban areas has not been impressive and at times negative except for 2005/6-2009/10 period. The drastic drop observed for the northern region from 9.3 percent in 2005/6 to -0.1 percent in 2012/13 raises policy concerns.

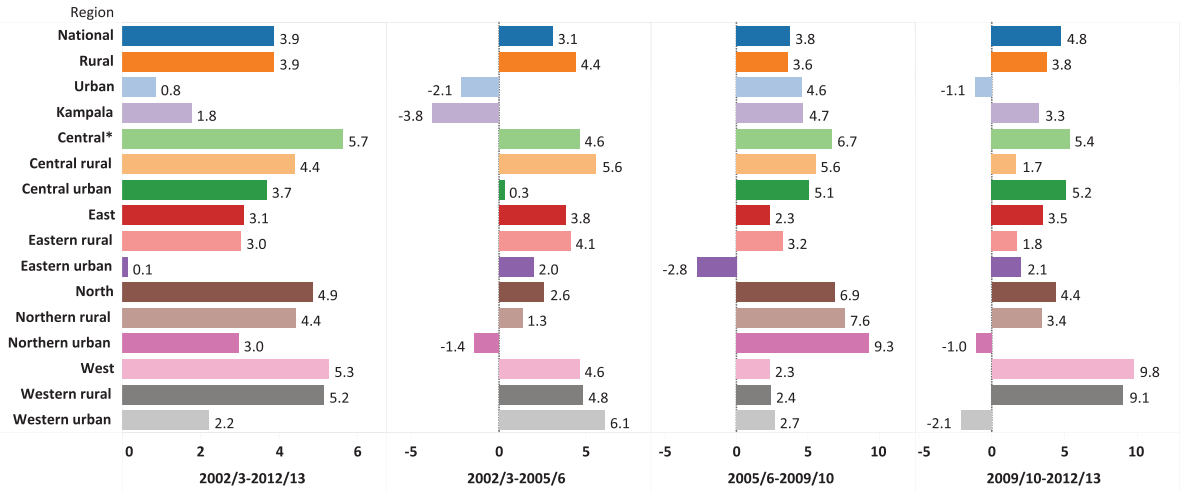
Table 2: Monthly consumption expenditure per capita, Shs (in 2005/6 prices)

	2002/3			2005/6			2009/10			2012/13		
Location	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Uganda	29,023	86,815	36,975	33,170	81,463	40,586	38,244	97,755	47,184	43,008	94,570	54,664
Central*	39,731	84,325	45,007	47,008	85,096	51,677	58,792	104,290	67,466	62,006	122,299	79,625
Kampala		122,243	122,243		109,224	109,224		131,618	131,618		145,928	145,925
Eastern	25,641	61,020	28,392	29,007	64,733	31,803	32,978	57,930	34,892	34,844	61,788	38,829
Northern	18,304	38,098	19,875	19,019	36,505	21,518	25,786	53,049	28,400	28,670	51,455	32,495
Western	30,540	63,917	33,446	35,282	76,756	38,440	38,826	85,423	42,163	51,448	79,958	57,053

Notes: a) Estimates are as reported by households but adjusted for inter-temporal price variations (inflation)
b) Central* excludes Kampala

c) The results are derived via a macro approach – as division of total consumption expenditure by total population.

Figure 2: Annualised growth rates – consumption per capita, % (2005/6 prices)



Consistent with the previous poverty works on Uganda, the price adjustments to the consumption aggregate go beyond adjusting for inter-temporal prices variations. These other price adjustments as earlier discussed include both: revaluation of consumption expenditure out of home produce into market prices and taking into account the spatial price variations. The results are presented in Table 3. These price adjustments taken together results into real consumption expenditure per capita increasing from Shs48,534 in 2009/10 to Shs57,692 in 2012/13 (see Table 3last row)– a rise in consumption by 18.9 percent. This translates into an annualised growth rate of 5.6 percent. Considering rural/urban divide, the annualised growth in urban areas contracts from 3.4 percent in the 2006-10 period to -1.1 percent in the 2010-13 period. The corresponding estimates for rural areas are 2 percent to 5.4 percent respectively.

Table 3: Adjusted mean consumption expenditure per capita, Shs

	2002/3			2005/6			2009/10			2012/13		
Location	Rural	Urban	Uganda	Rural	Urban	Uganda	Rural	Urban	Uganda	Rural	Urban	Uganda
As calculated in official reports	23,475	70,173	29,900	33,599	84,254	41,340	59,014	147,135	72,252	89,441	202,745	115,055
Revaluing home consumed food at market prices	24,643	70,606	30,968	35,678	85,118	43,233	61,353	147,996	74,368	90,241	187,968	112,334
Adjusting for regional prices	25,020	68,743	31,036	36,292	82,768	43,395	61,865	145,684	74,456	93,877	185,625	114,618
Adjusting for inflation (2005/06 prices)	30,929	85,051	38,376	36,942	84,482	44,207	39,993	96,852	48,534	47,219	93,548	57,692

Consumption expenditure per adult equivalent: Following previous poverty works on Uganda, we express the consumption aggregate in per adult equivalent instead of per capita terms and the results are presented in Table 4. The results reveal slower growth in per adult terms during the period 2010-13 compared to the earlier periods – at national level. On average, the real consumption expenditure per adult equivalent marginally increased from Shs62,545 in 2009/10 to Shs64,167 in 2012/13 – resulting into a modest annualised growth rate of 0.8 percent per annum. This finding suggests a drastic contraction in consumption growth during this period relative to the earlier sub-periods i.e. 2005/6-2009/10 and 2002/3-2005/6. The real consumption per adult equivalent in 2012/13 is higher that than in 2009/10 by 2.6 percent. Broadly speaking, growth in consumption followed a contraction path since 2002/3. To a great extent, this corroborates the Uganda's macro-economic growth trends as discussed earlier.

Table 4: Trends in consumption expenditure per adult equivalent, Shs (in 2005/6 prices)

Location	Mean (Shs. in 2005/6 prices)				Annualized growth rate (%)			
	2002/3	2005/6	2009/10	2012/13	2002-2013	2002-2006	2006-2010	2010-2013
National	49,556	55,092	62,545	64,167	2.6	3.5	3.2	0.8
Rural	40,920	47,031	52,467	52,893	2.5	4.6	2.7	0.3
Urban	103,688	99,525	119,552	102,756	-0.1	-1.4	4.6	-4.9
Central	73,145	79,830	100,441	98,412	2.9	2.9	5.7	-0.7
East	39,503	44,759	49,697	46,927	1.7	4.2	2.6	-1.9
North	29,974	31,329	38,988	41,506	3.2	1.5	5.5	2.0
West	46,892	55,325	56,232	68,667	3.8	5.5	0.4	6.5
Central rural	53,316	62,759	77,204	72,277	3.0	5.4	5.2	-2.1
Central urban	126,453	120,807	144,604	139,210	1.0	-1.5	4.5	-1.2
Eastern rural	36,398	41,584	47,616	43,504	1.8	4.4	3.4	-2.9
Eastern urban	76,347	82,147	74,748	66,657	-1.3	2.4	-2.4	-3.7
Northern rural	28,061	28,449	35,996	37,693	2.9	0.5	5.9	1.5
Northern urban	52,167	48,603	67,216	60,410	1.5	-2.4	8.1	-3.5
Western rural	43,692	51,894	52,538	63,458	3.7	5.7	0.3	6.1
Western urban	80,473	96,959	104,124	89,952	1.1	6.2	1.8	-4.7

Disaggregating growth in consumption by rural/urban, we note marginal changes for the rural areas (0.3 percent) whereas the urban areas registered a negative growth of 4.9 percent during the 2009/10-2012/13 period. The urban areas experienced significant contraction in growth in consumption compared of 4.6 percent in 2006-10 period. As much as the mean consumption, in real terms, in urban areas remained higher than the national average, the levels returned to those observed in the 2003-06 period. The contraction in rural areas seems to mirror the contraction in the agricultural GDP growth in the same period (Table A 1).

Considering regions, the 2010-13 period is marked with slower growth in consumption, with the exception of the western region. Western region registered growth of 6.5 percent per annum, marking a very strong recovery compared to 2006-10 period (of 0.4 percent). This rather strong growth was driven by the strong growth in rural areas (6.1 percent), with a significant recovery from a low rate of 0.3 percent in 2006-10 to 6.1 percent in the 2010-13 period. Ssewanyana & Kasirye (2010) cited drought as among the drivers explaining low growth in consumption in this region during the 2006/10 period. On the other hand, both the central and eastern regions registered negative growth in 2010-13 period, largely driven by urban areas. Accordingly, the urban areas suffered negative growth, regardless of the region ranging from 1.2 to 4.7 percent. Notably, the mean consumption in the urban areas of the eastern region returned to levels lower than those observed in 2003-06 period. The marginal growth observed in the northern region (2 percent) is largely driven by growth in the rural areas (of 1.5 percent) but slowed down by the negative growth in urban areas (of -2.9 percent). Northern region's recovery path was short-lived, raising concerns of maintaining and sustaining growth in the former war raged region.

Table 5: Poverty estimates in UNHS V 2012/13

			Poverty estimates, %			Contribution to (%):		
	Pop. Share	Mean Shs	P0	P1	P2	P0	P1	P2
Uganda	100.0	64,167	20.7	5.6	2.2	100.0	100.0	100.0
Rural	77.4	52,893	23.8	6.4	2.5	88.9	88.8	89.0
Urban	22.6	102,756	10.1	2.8	1.1	11.1	11.2	11.0
Central	25.8	98,412	4.2	1.0	0.3	5.3	4.4	3.8
Eastern	29.7	46,927	26.6	6.0	2.0	38.2	32.0	27.1
Northern	21.1	41,506	45.8	14.8	6.6	46.6	56.2	63.3
Western	23.5	68,667	8.7	1.7	0.5	9.9	7.3	5.8
Central rural	15.7	72,277	5.5	1.2	0.4	4.2	3.3	2.7
Central urban	10.1	139,210	2.2	0.6	0.3	1.1	1.2	1.2
Eastern rural	25.3	43,504	28.5	6.4	2.1	34.9	29.1	24.6
Eastern urban	4.4	66,657	15.8	3.7	1.2	3.3	2.9	2.5
Northern rural	17.5	37,693	48.4	15.8	7.1	41.0	49.9	56.6
Northern urban	3.5	60,410	32.7	10.0	4.2	5.6	6.4	6.7
Western rural	18.8	63,458	9.7	1.9	0.6	8.8	6.5	5.2
Western urban	4.6	89,952	4.7	1.0	0.3	1.0	0.8	0.6

3.2. Poverty trends and patterns

Uganda registers significant reduction in poverty: The results in Table 5 reveal that 20.7 percent[4]of the Ugandan population is poor with consumption per adult equivalent below the official absolute poverty line. The corresponding poverty headcount ratio for 2009/10 was 24.5 percent and this implies a reduction in poverty of 3.8 percentage points despite some very modest consumption growth of 0.8 percent. This decline in poverty at the national level is statistically significant and robust. The finding is corroborated by the stochastic dominance as depicted in Figure 3(a), which illustrates that living standards levels in 2009/10 were strictly first-order dominated by those in 2012/13. Accordingly, regardless of any possible choice of poverty line, the poverty rates in 2012/13 were below those in 2009/10. Indeed, poverty declined during the 2010-13 period. This also holds for the other poverty measures.

4. The poverty number of 20.7 percent is slightly higher than the official poverty estimate of 19.7 percent. These two figures are not statistically different.

Figure 3: Poverty incidence, 2009/10-2012/13

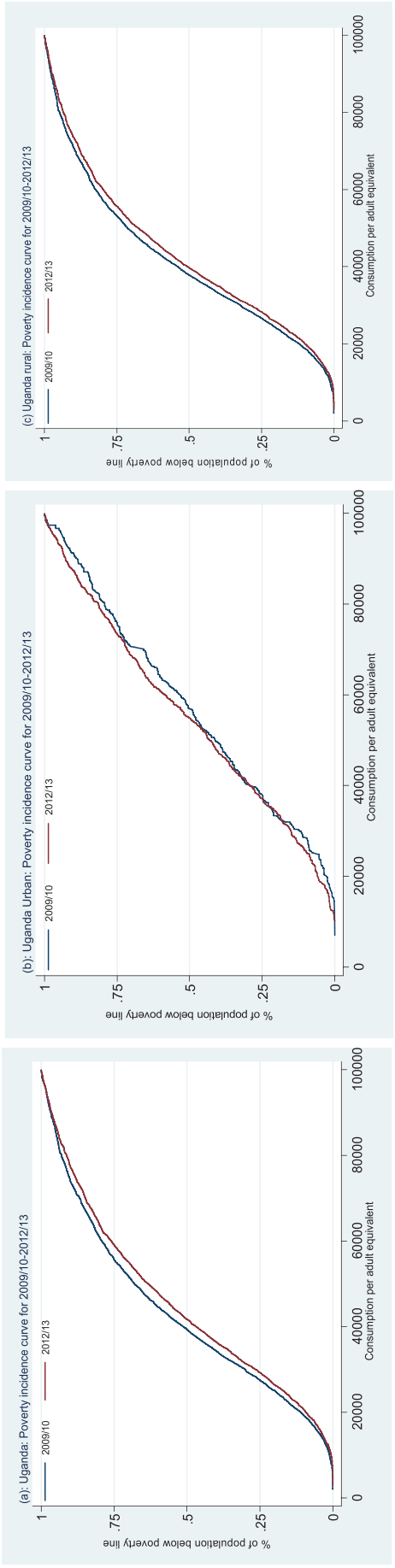
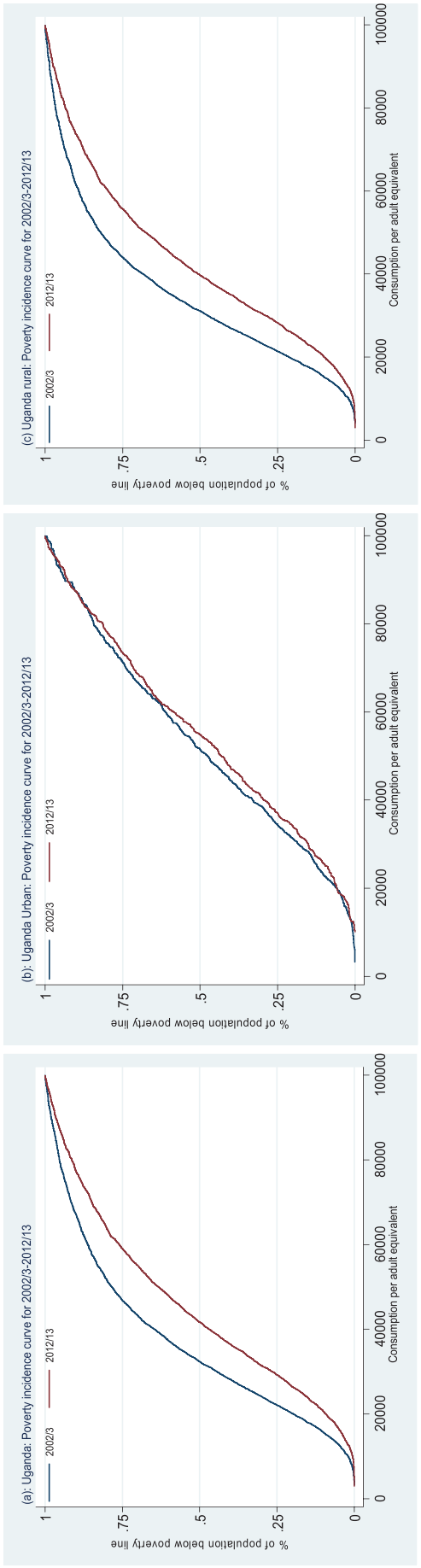


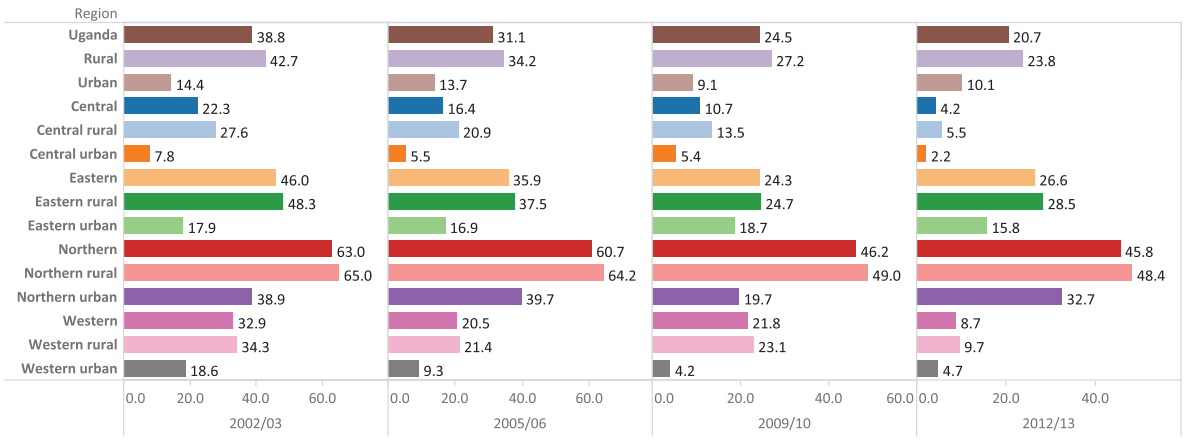
Figure 4: Poverty incidence, 2002/3 – 2012/13



Taking the entire decade, the incidence of poverty reduced by 18.1 percentage points from 38.8 percent in 2002/3 to 20.7 percent in 2012/13 (Figure 5). The decline in poverty reduction is robust as illustrated in Figure 3 (c). In absolute terms, the number of poor persons reduced from 9.8 to 7 million during the last decade (Table A 2). At the aggregate level, these findings continue to confirm Uganda's attainment of MGD 1 of halving income poverty earlier than 2015. It is important to point out that the pace of poverty reduction has subdued over time (Table A 2, Figure 5). The period 2003-06 recorded the fastest reduction of 7.7 percentage points; 4.6 percentage points in the period 2006-10 and 3.8 percentage points in the 2010-13 period.

Income poverty significantly declines in rural areas but worsens in urban areas: The incidence of poverty in rural areas is estimated at 23.8 percent in 2012/13, significantly well above the national average of 20.7 percent (Figure 5). Evidently, the living standards of the urban population continued to worsen with the poverty headcount ratio rising from 9.1 percent to 10.1 percent during 2009/10-2012/13, translating into an increase in the number poor persons, in absolute terms, from 0.42 million in 2009/10 to 0.78 million in 2012/13 (Table A 2). This is a noticeable reversal in poverty trends in urban areas regardless of poverty measure. The reversal is somewhat significant for the severity of poverty (P2) measure but not for the other poverty measures. Indeed, the reversal in poverty trends in urban areas as well as increasing levels of urbanisation from about 15 percent in 2009 to 22.6 percent in 2012/13 raises policy concerns. This finding seem to suggest that the poor from rural areas moved with their poverty in urban areas. The rural poverty continued to decline since 2002/3 but at a reducing rate – similar to the overall national picture. The robustness of poverty reduction in rural areas is confirmed in Figure 4 (c) but inconclusive for urban areas as illustrated in Figure 4 (b). It is evident from Table A 2 that the percentage decline in the rural poverty gap was larger than that in the headcount ratio, implying that mean growth in consumption pulled the poor closer to the poverty line. The rural areas' contribution to national poverty reduced to about 89 percent in 2012/13 but

Figure 5: Proportion of poor persons 2002/3-2012/13, %



still well above its share in total population (77.4 percent) - Table 5. The rural areas remain markedly poorer than the urban areas as much as they registered stronger growth in mean consumption over the period – but the gap is reducing.

There is a widening gap in deprivation status between leading and lagging areas/ regions of Uganda. Specifically, poverty remains unchanged in lagging regions (northern and eastern Uganda) but significant improvements in the leading regions. Poverty in the northern region declined to 45.8 percent in 2012/13 from 46.2 percent in 2009/10 whereas it increased in the eastern region from 24.3 percent in 2009/10 to 26.6 percent in 2012/13 (Figure 5). However, in both cases, these observed changes are not statistically significant. On the other hand, poverty significantly declined faster for the western region from 21.8 percent to 8.7 percent compared to the central region from 10.7 percent to 4.2 percent. The former estimates imply that poverty in the western region declined by 13.1 percentage points against 3.8 percentage points for Uganda as a whole. The regional ranking by incidence of poverty remains the same – with the highest incidence in northern region followed by the eastern region. Contribution to total national poverty increased in the eastern and the northern regions whereas there was a corresponding reduction in the central and the western regions (Table 5). For both, the eastern and northern regions, the combined contribution increases from 67 percent in 2009/10 to 84.8 percent in 2012/13. Northern region alone, contributed 46.6 percent of the total national poverty in 2012/13 relative to its share in total population of 21.1 percent. The corresponding percentage for eastern region is 38.2 percent against its share in total population of 29.7 percent. The severity of the poverty in the northern region can also be judged from the fact that the proportion of poor persons is two-fold higher than the national average. Furthermore, the estimated number of poor persons in 2012/13 (of 3.3 million persons) returned to its prior pre-peace restoration levels in 2005/6.

Breaking the regions into rural/urban divide reveals that poverty in the eastern region is driven by the increase in rural poverty from 24.7 percent in 2009/10 to 28.5 percent in 2012/13, though this increase is not statistically significant. Both in the central and western regions, the decline in poverty is driven by significant growth in people's incomes that translated into significant reduction in rural poverty. Increases in urban poverty were not statistically significant except for the northern region. The significant contraction in growth in the urban areas of northern Uganda resulted in a significant increase in the share of poor persons – from 19.7 percent in 2009/10 to 32.7 percent in 2012/13—a reversal registered during this period.

The cost of reducing poverty as measured by the poverty gap increased in the urban areas of the northern region – if government was to perfectly eliminate income poverty in the region, it would require more financial resources in 2012/13 than it would in 2009/10 (Table A 2). Taking the entire decade, poverty reduction in the central region (both rural and urban) and in the northern region (rural) followed a declining trend since 2002/3. Yet, there were reversals in the western and eastern regions. Overall, there is growing gap between leading and lagging regions in terms of progress towards

poverty reduction. These unchecked growing regional disparities have implications for Uganda's desire to transit from low to middle income country.

3.3 Changes in income inequality

Growth in consumption stronger at the median than at the mean since 2009/10: Evidently,the results in Table 6 suggest that income grew faster at the median (2.6 percent) compared at the mean of 0.8 percent during 2010-13 period – implying improvements in the distribution of income. There is also slower growth for the most affluent Ugandans relative to other deciles. This pattern also holds for rural and urban areas. Of great policy concern is the negative growth in urban areas, regardless of decile. This contrasts with the earlier sub-periods. This underlies the worsening poverty estimates for the urban population as discussed earlier. Regardless of deciles, while rural areas experienced stronger growth during the 2003-06 period, the urban areas' stronger growth was during the 2006-10 period.

Table 6: Consumption expenditure per adult equivalent, Shs (in 2005/6 prices)

	2002/03	2005/06	2009/10	2012/13	2002-2006	2006-2010	2010-2012
National							
Decile 1	16,219	18,178	20,264	21,686	3.8	2.7	2.2
Decile 2	20,834	23,604	26,485	28,434	4.2	2.9	2.3
Decile 3	25,159	28,374	31,808	34,201	4.0	2.9	2.3
Decile 4	29,542	33,677	37,147	39,988	4.4	2.5	2.4
Decile 5	34,303	39,546	43,284	46,883	4.7	2.3	2.6
Decile 6	40,266	46,591	50,652	55,241	4.9	2.1	2.8
Decile 7	47,770	56,542	61,213	66,601	5.6	2.0	2.7
Decile 8	61,098	72,468	77,720	83,976	5.7	1.7	2.5
Decile 9	89,196	102,407	115,832	121,272	4.6	3.1	1.5
Urban							
Decile 1	26,999	27,178	31,964	30,330	0.2	4.1	-1.7
Decile 2	36,493	37,466	41,883	41,163	0.9	2.8	-0.6
Decile 3	45,640	46,838	55,075	52,453	0.9	4.0	-1.6
Decile 4	55,318	58,385	67,328	61,595	1.8	3.6	-2.9
Decile 5	66,185	72,110	80,632	75,228	2.9	2.8	-2.2
Decile 6	79,089	86,150	97,385	89,187	2.8	3.1	-2.8
Decile 7	96,559	106,977	125,923	111,022	3.4	4.1	-4.1
Decile 8	125,798	135,488	161,472	146,358	2.5	4.4	-3.2
Decile 9	196,821	196,061	244,608	205,069	-0.1	5.5	-5.7
Rural							
Decile 1	15,476	17,459	19,251	20,716	4.0	2.4	2.4
Decile 2	19,846	22,515	25,141	26,358	4.2	2.8	1.5
Decile 3	23,801	27,033	30,248	31,400	4.2	2.8	1.2
Decile 4	27,693	31,586	34,951	36,700	4.4	2.5	1.6
Decile 5	31,909	36,642	40,357	42,319	4.6	2.4	1.5
Decile 6	36,844	42,474	46,145	49,003	4.7	2.1	1.9
Decile 7	42,843	50,006	54,378	57,320	5.1	2.1	1.7
Decile 8	52,001	62,006	67,056	70,128	5.9	2.0	1.5
Decile 9	72,219	83,844	92,227	95,440	5.0	2.4	1.1

The growth incidence curves provide insights into how the per adult equivalent consumption expenditure at each percentile has changed over time. This is done for the period 2009/10-2012/13 (Figure 6) and for the entire period of analysis, 2002/3 to 2012/13 (Figure 7). Considering the period 2009/10 – 2012/13, there was an overall growth in consumption expenditure with the mean of percentile growth of 2.3 percent per annum (Table 7). All the segments of the population with the exception of top segment enjoyed growth slightly higher than average growth. The rate of pro-poor growth (2.5 percent) was slightly higher than the mean growth of 2.3 percent. Similar patterns are observed for the rural areas. Put differently, the poor benefitted from the growth more than the rich, in a period with the least growth as measured by GDP growth. All the urban segments suffered declining consumption, the rich benefitted more than the poor.

Broadly speaking, for the entire decade, the rate of pro-poor growth was lower than the mean of growth rates – implying that growth was pro-rich rather than pro-poor. The only period of pro-poor growth was the 2009/10-2012/13 period, though this coincides with a period where the GDP growth was least as already discussed.

Table 7: Growth in consumption expenditure per adult equivalent, %

	Mean of growth rates	Rate of pro-poor growth
2002/3 – 2012/13		
National	10.72	10.57
Rural	9.71	9.92
Urban	3.57	3.57
2002/3 – 2005/6		
National	4.70	4.41
Rural	4.78	4.40
Urban	1.59	1.03
2005/6 – 2009/10		
National	3.47	3.31
Rural	3.09	3.09
Urban	5.65	6.40
2009/10 – 2012/13		
National	2.26	2.52
Rural	1.60	2.30
Urban	-3.41	-5.35

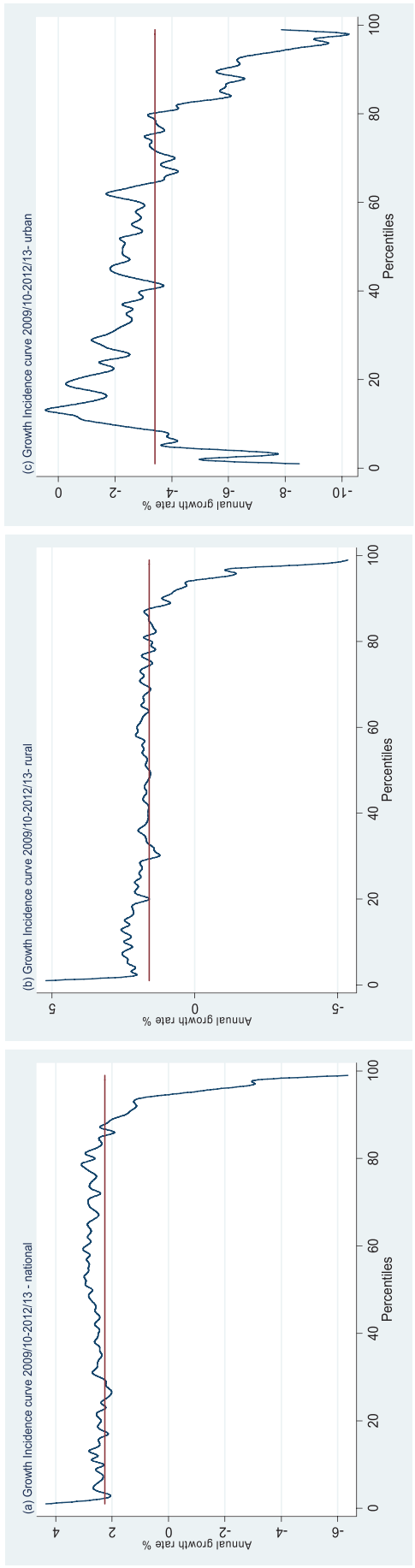

(c) Growth Incidence curve 2009/10-2012/13- urban
(b) Growth Incidence curve 2009/10-2012/13- rural
(a) Growth Incidence curve 2009/10-2012/13 - national
Annual growth rate %
Percentiles

Figure 6: Growth incidence curve, 2009/10-2012/13

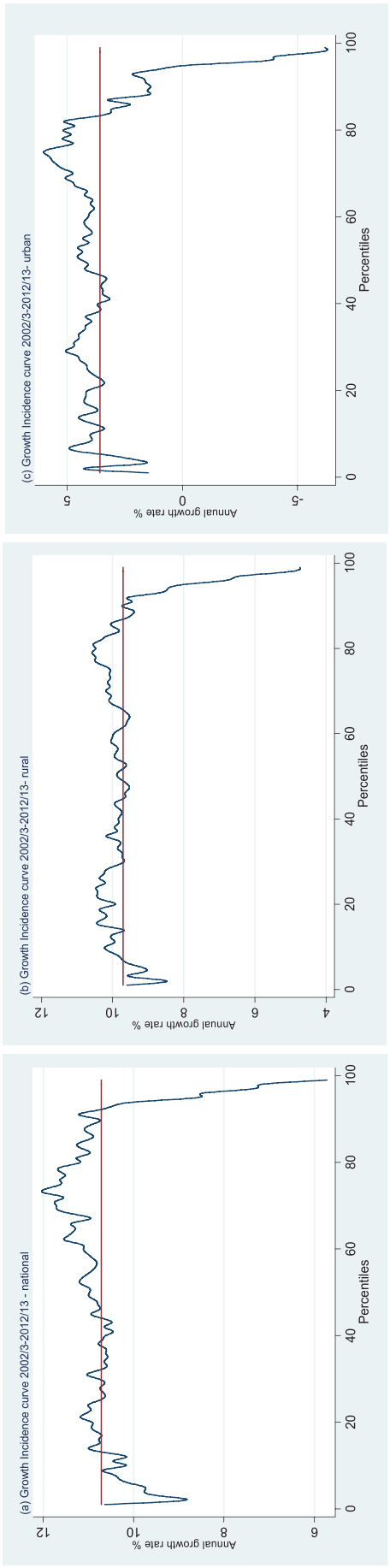

(c) Growth Incidence curve 2002/3-2012/13- urban
(b) Growth Incidence curve 2002/3-2012/13- rural
(a) Growth Incidence curve 2002/3-2012/13 - national
Annual growth rate %
Percentiles

Figure 7: Growth incidence curves, 2002/3 – 2012/13

While inequality worsened in 2009/10, a clear trend towards improvement in the distribution of income is noted in 2012/13. The Gini coefficient as a measure of income inequality reduced significantly from 0.426 in 2009/10 to 0.398 in 2012/13 (Table A 3, Figure 8).Inequality, at national level, returns to its 1999/2000 levels (of 0.395). This is a significant achievement after years of growing income inequality as presented in Figure 8. These patterns hold for rural and urban areas. The significant change in urban areas is driven by the significant changes in the urban areas in the central region; whereas that in the rural areas is driven by the central and western regions. For the entire decade, inequality reduced from 0.428 to 0.398 as illustrated in Figure 8. Unlike poverty ranking, there are noticeable changes in inequality ranking by region. Incomes are less unequal in the northern region relative to those in the western region in 2012/13 whereas the reverse is noted in 2009/10. The northern region experienced trends towards greater inequality, though not statistically significant during the 2010-13 period. As much as the increase is not statistically significant, the rather high inequality raises policy concerns given the several anti-poverty intervention after the restoration of peace in the region.

3.4 Decomposition of changes in poverty

This paper explores the source of change in poverty by decomposing poverty into changes due to growth and distribution components following Datt & Ravallion (1992). At the aggregate level, growth in income would have reduced the poverty headcount ratio by 1.4 percentage points in 2012/13 assuming distribution remained the same as in 2009/10. Had the mean consumption expenditure remained unchanged, the incidence of poverty as measured by the headcount ratio would have declined by 2.4 percentage points between 2009/10 and 2012/13. These findings imply that both income growth and distribution of income had a poverty reducing effect, with change in distribution dominating the growth effect. This is quite different from other sub-periods where the growth effect dominated the change in distribution of income that contributed to the decline in poverty (Table 8).

Figure 8: Trends and patterns in Gini coefficient, 2002/3 – 2012/13

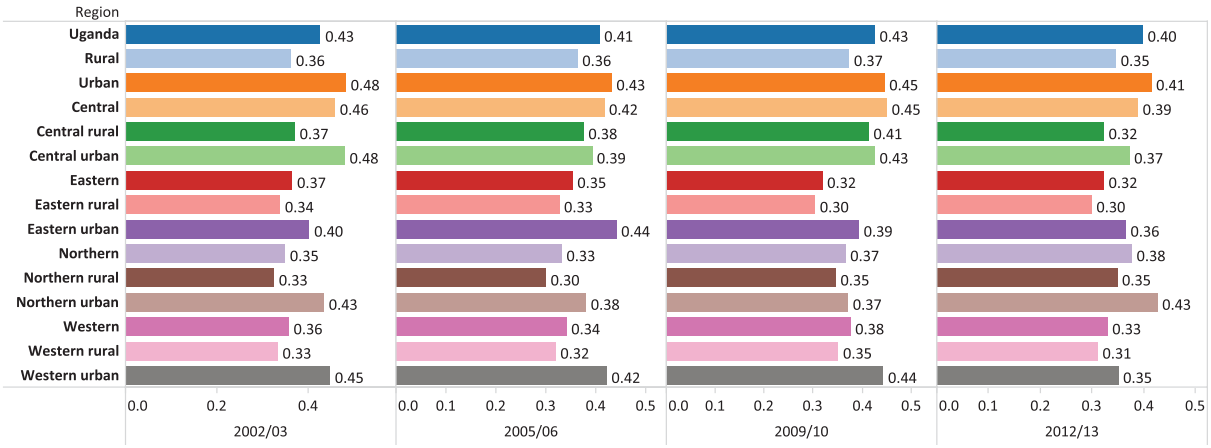


Table 8: Decomposition of change in poverty into growth and distribution effects

	2002-2013		2002-2006		2005-2010		2010-2013	
Location	Growth	Inequality	Growth	Inequality	Growth	Inequality	Growth	Inequality
National	-15.3	-2.9	-6.6	-1.2	-7.4	0.8	-1.4	-2.4
Rural	-16.9	-2.1	-9.3	0.8	-7.0	-0.1	-0.4	-3.0
Urban	0.3	-4.5	1.3	-1.9	-5.9	1.3	4.3	-3.2
Central	-12.1	-5.9	-3.9	-1.9	-9.1	3.4	0.5	-7.0
Eastern	-14.0	-5.4	-9.6	-0.6	-7.8	-3.8	3.7	-1.4
Northern	-20.3	3.1	-3.1	0.8	-14.9	0.5	-4.6	4.2
Western	-21.0	-3.3	-10.1	-2.3	-0.9	2.2	-8.6	-4.5

There are notable differences by geographical areas. During the period 2010-13, the distribution of income had a more poverty reducing effect relative to the growth effect in the central region and in rural areas - in absolute terms. The reverse is observed in the western region. If there was no change in mean consumption expenditure, changes in distribution would have reduced poverty by 3.2 percentage points in urban areas. Instead, the slowdown in mean income growth was poverty enhancing to about 4.3 percentage points - hence the increase in the incidence of poverty. Similar patterns are observed for the eastern region, in absolute terms. Changes in the distribution component in the northern region tended to be poverty enhancing but the growth potential in reducing poverty was fully realised as the total decline in poverty was more than the proportional to the increase in poverty due to distribution.

During the decade 2002/3-2012/13, changes in the distribution of income were poverty reducing except for northern region; whereas changes in mean income were poverty enhancing in urban areas. Overall, the observed decline in absolute poverty is largely accounted for by the growth component rather than by changes in the income distribution.

3.5 Possible explanations for the most recent poverty trends- 2009/10-2012/13 period

The possible drivers for poverty reduction in the periods before 2009/10 are discussed in detail in Ssewanyana & Kasirye (2010). Instead, the focus in this section is on the 2009/10-2012/13 period. Unlike the previous sub-periods, the most recent sub-period is marked with a lower percentage reduction in poverty, and unchanged incidence of poverty especially in the lagging areas and urban areas. Yet, the western and central regions as well as rural areas registered significant reduction in income poverty. This calls for insights into what happened to peoples' incomes during this period. Indeed, the easing up of the inflationary pressure from 23.5 percent in 2011/12 to 5.6 percent in 2012/13 partly explains the observed poverty trends. The relatively good weather conditions in 2012/13 seem to have boosted domestic food supply and hence a fall in food prices. Yet, the drought conditions that hit the eastern region towards April 2013 partly explain the increase in the incidence of poverty, though not statistically significant, in the rural areas. The likely impact of these conditions is supported by the likelihood of those households covered in April and May 2013 to have lower mean consumption rela-

tive to the overall eastern region average.

Previous studies on poverty dynamics (such as Lawson *et al*. 2006) cite household size as one of major drivers of poverty. This paper sought to investigate whether there were any significant changes in household size during the period 2010-13. The rural north registered significant reduction in household size from 5.3 in 2009/10 and 5.0 in 2012/13 whereas significant increase is noted for western Urban from 3.4 to 4.2 respectively. Nonetheless, these observed significant changes do not seem to have led to significant changes in the incidence of poverty in these geographical areas.

The last three survey rounds, inquired in the household's most important source of income in the past 12 months prior to the interview. Table 9 presents the poverty profile according to the most important source of income. Notably is the declining importance of agriculture as the most important source of income from 57.3 percent in 2005/6 to 48.9 percent in 2012/13 – in terms of population share. Despite this trend, the incidence of poverty and its overall contribution to national poverty also declined. Its contribution to national poverty reduced from 64.0 percent in 2005/6 to 53.7 percent in 2012/13. These trends partly explain the observed reduction in rural poverty though without sizeable increase in the agriculture GDP growth rate. Accordingly, poverty remains more pronounced among the population that cited agriculture relative to other cited sources of income, with mean consumption well below the national average, regardless of the survey rounds as presented in Table 6.

Table 9: Poverty by the most important source of income in the past 12 months

Income source	Pop. share	Mean CPAE	Poverty estimate			Contribution to:		
			P0	P1	P2	P0	P1	P2
2005/06								
Uganda	*100.0*	*55,092*	*31.1*	*8.8*	*3.5*	*100.0*	*100.0*	*100.0*
Agriculture	57.3	43,431	34.7	9.4	3.7	64.0	61.5	59.4
Wage employment	17.0	74,573	23.3	6.4	2.5	12.7	12.4	12.1
Non-agric. enterprise	18.1	72,723	20.4	5.3	2.1	11.9	11.1	11
Remittances	3.4	81,492	19.1	5.0	2.0	2.1	2.0	1.9
Others	4.2	37,392	69.3	27.5	13.2	9.3	13.1	15.6
2009/10								
Uganda	*100.0*	*62,545*	*24.5*	*6.7*	*2.8*	*100.0*	*100.0*	*100.0*
Agriculture	51.5	45,751	28.6	7.7	3.0	60.2	58.8	56.2
Wage employment	21.3	84,404	17.1	4.3	1.7	14.9	13.7	13
Non-agric. enterprise	20.4	78,160	22.1	6.6	3.1	18.4	19.8	22.5
Remittances	4.5	67,839	20.5	6.2	2.6	3.7	4.1	4.1
Others	2.3	87,570	29.1	10.6	5.1	2.7	3.6	4.2
2012/13								
Uganda	*100.0*	*64,167*	*20.7*	*5.6*	*2.2*	*100.0*	*100.0*	*100.0*
Agriculture	48.9	50,944	22.7	5.4	1.9	53.7	47.6	41.6
Wage employment	20.7	74,843	19.5	5.9	2.5	19.4	21.9	23.9
Non-agric. enterprise	23.0	77,853	19.7	6.0	2.7	22.0	25.0	28.2
Remittances	4.7	77,683	13.4	3.7	1.7	3.0	3.1	3.6
Others	2.8	81,211	13.8	4.7	2.2	1.8	2.3	2.8

There is a noticeable increase in the importance of non-agricultural enterprises as the most important source of income from 18.1 percent in 2005/6 percent to 23.0 percent in 2012/13 – in terms of population shares. This could partly be suggestive of a switch from agriculture to non-agriculture as main source of income. This finding is supported by the low incidence of poverty for those whose households reported non-agriculture enterprises from 22.1 percent in 2009/10 to 19.7 percent in 2012/13. Indeed, the mean consumption for those that cited non-agricultural enterprises are more than 1.5 times that of their counterparts that cited agriculture. Regionally, the most significant changes are noted for the western region. The share of the population, in terms of importance, increased from 14.7 percent to 18.4 percent respectively, with significant reduction in the headcount and poverty gap (Table A 4).On the other hand, in the northern region, the increasing population share from 23.3 percent in 2009/10 to 28.9 percent in 2012/13 did not result into improved living standards. Accordingly, the incidence of poverty is markedly higher among these households compared to those that cited agriculture. These findings could imply that the influx of people into non-agriculture enterprise resulted into lower earnings or these persons lacked the necessary entrepreneurial skills to effectively participate in these activities.

Additionally, the 2012/13 survey round captured information on whether a household operated a non-crop enterprise in the past 12 months prior to the interview. Nearly 50 percent of the population resided in households with a non-crop enterprise with poverty levels (18.1 percent) significantly lower than that of their counterparts in households without such enterprise (23.2 percent). At the national level, mean consumption levels of those households with a non-crop enterprise (Shs72,135) are higher than their counterparts without such enterprises (Shs56,217). Similar patterns are observed at regional level with the exception of the northern region. This finding corroborates with the results in Table A 4 that as much as the population share in the northern region that reported non-agriculture enterprises as the most important source of income increased, the incidence of poverty remained unchanged. Evidently, the incidence of poverty among these households is significantly higher than for those households that cited agriculture as most important source of income.

The importance of wage employment remained unchanged between 2009/10 and 2012/13. While the incidence of poverty reduced between the 2005/6-10 period, it increased by 2 percentage points in the 2010-13 period. The mean income of those households who reported wage employment as the most important source of income reduced from Shs84,404 in 2009/10 to Shs74,843 in 2012/13 – translating into 11.3 percent reduction. The contribution of these households to total poverty increased by 7.1 percentage points. However, these aggregate estimates need to be interpreted with caution. Considering the regional disaggregation, results seem to suggest significant reduction in income poverty in the central and western regions but a significant increase in the northern region – with the poverty gap increasing from 10.9 percent in 2009/10 to 16.9 percent in 2012/13. This is against an increase in the share of the population that reported wage employment as the most important source of income from

15.3 percent to 19.7 percent. After the restoration of peace in this region, there was a massive scaling down of NGOs leading to loss of employment and related impacts on salary/wage levels. There is no doubt that the NGOs were paying better than other employers in the region. One should not also overlook the casual nature of wage employment in this region. On the other hand, there is an observed increase in all the poverty measures in the eastern region – though not statistically significant.

On the other hand, the mean income of those households that reported remittances as the most important source of income increased by 14.5 percent. This increase was poverty reducing, leading to a significant decline in the incidence of poverty from 20.5 percent in 2009/10 to 13.4 percent in 2012/13. The importance of remittances to the Ugandan households corroborates with the 2013 Uganda FinScope III survey findings (EPRC 2013).

There have also been government efforts mainly through SACCOs to increase access to credit. The 2012/13 captured information on individuals' access to loan/credit in the past 12 months prior to the survey interview. A household is said to have had access to credit/loan if at least one of its members accessed credit /loan in the past 12 months. Evidently, the incidence of poverty is lower among the population whose households had accessed to credit (11.4 percent) compared to their counterparts without access (26.4 percent). There is a significant regional disparities in access to credit with the western region leading followed by the central region. These patterns are consistent with the 2013 FinScope III survey report (EPRC 2013).

4. CONCLUSIONS

The paper has demonstrated that Uganda has continued to register significant reduction in poverty based on the data drawn from repeated cross-sectional household surveys, but at slower rates of reduction with significant regional disparities. The rate of reduction was fastest during the period 2002/3-2005/6 and slowest in the 2009/10-2012/13. This progress corroborates with growth in consumption as well as the GDP growth rates in the same period. For instance, higher GDP growth rates in 2002/3 to 2005/6 translated into higher growth in consumption relative to other sub-periods. The results have further revealed that growth was not pro-poor for the entire decade with the exception of the period 2009/10-2012/13. In the most recent period, growth was pro-poor at national level and for rural areas. Put differently, growth benefitted the poor as much as GDP growth recorded its least performance in this period.

On the decomposition of the changes in poverty during the period 2002/3-2012/13, the results showed that the observed declines in poverty were largely attributable to growth rather than changes in the distribution with the exception of urban areas. By contrast, at the national level, the improvement in the distribution of living standards contributed more to the decline in poverty than increases in the average living standards between 2009/10 and 2012/13. Similar patterns noted for the rural areas and in the central region. Anecdotally, the improvement in the distribution of income could be explained by the on-going efforts to curb down on corruption.

Since 2002/3, Uganda seem to have suffered a twin problem of sustaining growth as well as sustaining the poverty reduction momentum. Poverty declined not only in terms of headcount ratio but also in as poverty gap and severity. The known lagging areas seem to have not been able to catch up with the leading ones in terms of poverty reduction questioning the effectiveness of the current government anti-poverty interventions/ programs. The geography of poverty has remained unchanged and the progress in poverty reduction seem to be widening. The observed increase in poverty in the urban areas and in the eastern region was driven by the improvements in the distribution of income though not strong enough to avert the poverty enhancing effect arising from the declining average living standards.

Poverty reduction was significant in the more developed regions (western and central) and remained unchanged in the least developed regions (Northern and Eastern) during the 2009/10-2012/13 period. The growth in consumption in the least developed regions especially in the northern region was not strong enough to significantly lift people out of poverty. The failure to sustain the strong growth in consumption in the northern region amidst several government anti-poverty interventions/programs in the region raises policy challenges. In depth analysis has demonstrated that those households whose most important source of income was non-agricultural enterprise or wage employment their population share increased as well as their incidence of poverty. This findings calls a detailed understanding of the type of activities these households involved in.

Broadly speaking, the progress in urban areas is not impressive with negative growth rates and reversal in the incidence of poverty in the period 2009/10-2012/13. This should be a policy concern given the growing level of urbanization from 15 percent to 22 percent in the same period. This finding imply that the poor from the rural areas moved with their poverty in the urban areas. On a positive note, there are notable significant improvements in the distribution of living standards. Overall, urban poverty is lower than rural poverty but is rising when rural poverty is declining. Accordingly, future government anti-poverty interventions need to pay attention to the growing urban poverty.

The unchanged poverty levels and seemingly rising inequality observed in the northern region raises policy concerns. There is dire need to systematically evaluate the current and future anti-poverty reduction interventions. Currently, the government anti-poverty interventions/programs are either universal or geographical in nature. Probably, the current anti-poverty interventions are spread too thinly to have an impact on the living standards of the citizenry. The alternative would be to think through how the current geographical targeting could be improved for better outcomes.

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TABLES

Table A 1: Average GDP growth rates at market prices (2002 prices), %

	2002/3-2012/13	2002/3-2005/6	2006/7-2009/10	2010/11-2012/13
Total GDP at market prices	6.9	**7.6**	**7.6**	**5.1**
Agriculture, forestry and fishing	1.4	**1.6**	**1.7**	**1.0**
Cash crops	2.1	-1.4	5.8	1.9
Food crops	0.6	0.1	1.7	-0.3
Livestock	3.0	3.2	3.0	2.9
Forestry	3.8	4.7	3.5	3.0
Fishing	1.0	6.1	-4.8	1.9
Industry	8.3	**10.9**	**7.7**	**5.7**
Mining & quarrying	10.3	11.9	10.6	7.8
Manufacturing	6.3	6.9	7.4	4.0
-Formal	6.9	8.1	8.1	3.9
-Informal	4.6	3.8	5.6	4.3
Electricity supply	5.6	1.8	6.6	9.4
Water supply	4.0	3.6	4.4	4.1
Construction	10.5	15.7	8.3	6.4
Services	7.7	**8.4**	**8.7**	**5.6**
Wholesale & retail trade; repairs	6.9	7.7	8.9	3.1
Hotels & restaurants	8.6	8.2	9.8	7.3
Transport & communications	15.0	14.4	17.7	12.1
-Road, rail & water transport	9.7	8.5	14.4	5.1
-Air transport and support services	8.9	11.5	7.2	7.7
-Posts and telecommunication	23.4	26.8	23.8	18.3
Financial services	12.4	14.5	15.0	6.0
Real estate activities	5.6	5.5	5.6	5.8
Other business services	8.9	9.1	11.5	5.3
Public administration & defence	4.5	5.4	6.8	0.1
Education	4.1	7.5	1.8	2.7
Health	2.7	8.3	-1.2	0.5
Other personal & community services	12.5	13.4	12.6	11.2

Source: MoFPED (2013), Background to the budget

Table A 2: Patterns and trends in poverty estimates (%) and number of poor persons

	Headcount				Poverty gap				Severity of poverty				Number of poor persons, millions			
	2002/3	2005/6	2009/10	2012/13	2002/3	2005/6	2009/10	2012/13	2002/3	2005/6	2009/10	2012/13	2002/3	2005/6	2009/10	2012/13
Uganda	38.8	31.1	24.5	20.7	11.9	8.8	6.7	5.6	5.1	3.5	2.8	2.2	9.81	8.44	7.51	7.04
Rural	42.7	34.2	27.2	23.8	13.1	9.7	7.6	6.4	5.7	3.9	3.1	2.5	9.31	7.87	7.10	6.26
Urban	14.4	13.7	9.1	10.1	3.9	3.5	1.8	2.8	1.6	1.4	0.6	1.1	0.50	0.57	0.42	0.78
Central	22.3	16.4	10.7	4.2	5.5	3.6	2.4	1.0	1.9	1.3	0.8	0.3	1.67	1.30	0.87	0.37
Eastern	46.0	35.9	24.3	26.6	14.1	9.1	5.8	6.0	6.0	3.5	2.1	2.0	3.19	2.45	2.20	2.69
Northern	63.0	60.7	46.2	45.8	23.4	20.7	15.5	14.8	11.5	9.2	7.3	6.6	2.90	3.25	2.84	3.28
Western	32.9	20.5	21.8	8.7	8.5	5.1	5.4	1.7	3.3	1.8	2.0	0.5	2.06	1.44	1.60	0.70
Central rural	27.6	20.9	13.5	5.5	6.9	4.7	3.2	1.2	2.5	1.6	1.1	0.4	1.51	1.17	0.72	0.30
Central urban	7.8	5.5	5.4	2.2	1.6	1.1	1.0	0.6	0.5	0.5	0.3	0.3	0.16	0.13	0.15	0.08
Eastern rural	48.3	37.5	24.7	28.5	14.9	9.5	6.0	6.4	6.3	3.6	2.1	2.1	3.09	2.36	2.07	2.46
Eastern urban	17.9	16.9	18.7	15.8	4.8	4.4	3.2	3.7	2.1	1.5	1.0	1.2	0.10	0.09	0.13	0.24
Northern rural	65.0	64.2	49.0	48.4	24.3	22.3	16.6	15.8	11.9	10.0	7.8	7.1	2.76	2.95	2.72	2.89
Northern urban	38.9	39.7	19.7	32.7	13.9	11.5	5.1	10.0	6.6	4.5	1.9	4.2	0.14	0.30	0.12	0.39
Western rural	34.3	21.4	23.1	9.7	8.9	5.4	5.8	1.9	3.4	1.9	2.2	0.6	1.96	1.39	1.58	0.62
Western urban	18.6	9.3	4.2	4.7	4.8	2.0	1.0	1.0	1.9	0.6	0.4	0.3	0.10	0.05	0.02	0.07

Table A 3: Trends in income inequality as measured by the Gini coefficient

	Gini coefficient				T-test statistics		
	2002/03	2005/06	2009/10	2012/13	2002-05	2005-2010	2010-13
Uganda	0.428	0.408	0.426	0.398	-1.97	2.17	-3.38
Rural	0.363	0.363	0.375	0.346	0.00	1.17	-2.93
Urban	0.483	0.432	0.447	0.414	-2.08	0.86	-2.02
Central	0.460	0.417	0.451	0.388	-2.31	2.33	-4.58
Eastern	0.365	0.354	0.319	0.321	-0.84	-2.61	0.15
Northern	0.350	0.331	0.367	0.377	-1.60	2.38	0.63
Western	0.359	0.342	0.375	0.328	-1.69	0.10	-0.25
Central rural	0.372	0.376	0.414	0.323	0.25	1.84	-4.48
Central urban	0.480	0.392	0.427	0.371	-2.84	1.56	-3.00
Eastern rural	0.338	0.326	0.304	0.298	-0.76	-1.72	-0.34
Eastern urban	0.403	0.441	0.393	0.364	1.60	-1.40	-0.74
Northern rural	0.326	0.300	0.347	0.348	-1.84	2.56	0.07
Northern urban	0.434	0.381	0.372	0.426	-1.89	-0.27	1.61
Western rural	0.333	0.319	0.352	0.310	-1.30	2.23	-3.08
Western urban	0.448	0.421	0.443	0.351	-1.29	0.37	-1.45

Table A 4: Poverty estimates by the most important source of income and region

	Pop. Share		P0		P1		P2	
Region/Source	2009/10	2012/13	2009/10	2012/13	2009/10	2012/13	2009/10	2012/13
Uganda	**100.0**	**100.0**	**24.5**	**20.7**	**6.7**	**5.6**	**2.8**	**2.2**
Central								
Agriculture	35.0	33.9	*16.3*	*5.8*	*4.0*	*1.3*	*1.4*	*0.4*
Wage employment	30.7	24.2	*8.6*	*4.0*	*2.0*	*0.8*	*0.6*	*0.2*
Non-agriculture enterprise	26.3	31.6	5.5	2.9	0.9	0.7	0.2	0.3
Transfers/remittances	4.7	7.1	3.7	3.7	0.6	0.5	0.2	0.1
Others	3.2	3.3	24.0	4.2	5.3	2.2	1.3	1.3
Eastern								
Agriculture	58.3	59.8	27.6	31.4	6.6	6.9	2.3	2.2
Wage employment	16.8	17.4	19.1	24.0	4.4	6.8	1.6	2.8
Non-agriculture enterprise	17.8	15.2	23.7	15.8	5.1	2.6	2.0	0.6
Transfers/remittances	5.2	4.6	14.1	18.5	4.2	3.4	1.6	1.1
Others	1.9	3.1	2.3	13.3	1.2	3.8	0.6	1.2
Northern								
Agriculture	53.4	45.1	45.8	39.5	*14.1*	*10.9*	*6.1*	*4.2*
Wage employment	15.3	19.7	37.8	47.1	*10.9*	*16.9*	*4.8*	*7.8*
Non-agriculture enterprise	23.3	28.9	51.7	56.1	20.2	19.6	10.4	9.2
Transfers/remittances	4.7	3.8	39.9	38.9	15.4	14.9	7.1	7.9
Others	3.3	2.5	61.3	39.2	27.8	13.7	15.2	7.3
Western								
Agriculture	59.8	55.0	*24.9*	*9.8*	*6.7*	*2.1*	*2.6*	*0.6*
Wage employment	21.5	21.7	16.4	11.2	*4.1*	*2.2*	1.5	0.7
Non-agriculture enterprise	14.7	18.4	*13.6*	*4.3*	*2.0*	*0.5*	0.5	0.1
Transfers/remittances	3.1	3.0	36.9	0.0	8.3	0.0	2.8	0.0
Others	0.9	2.0	21.0	3.5	3.4	0.6	0.5	0.1

FIGURES

Figure A 1: Trends in GDP growth rates (in 2002 prices), %

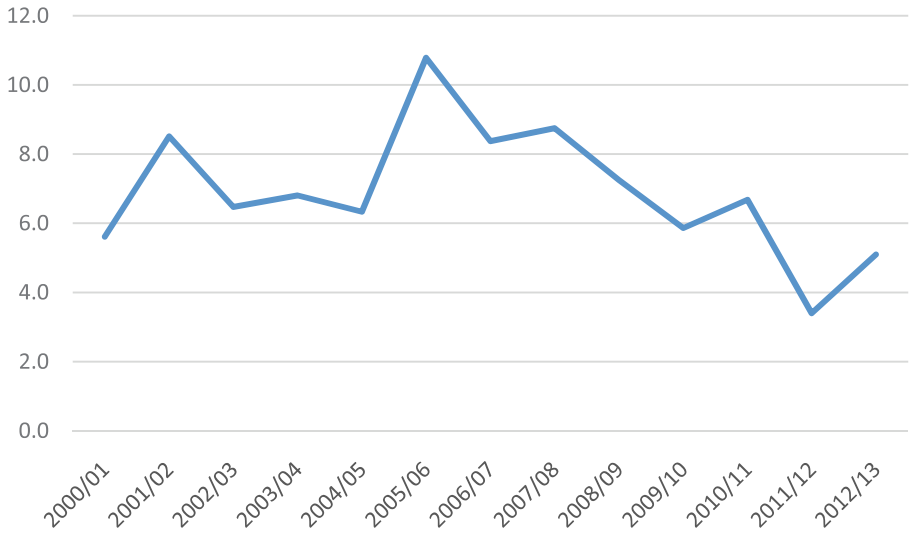
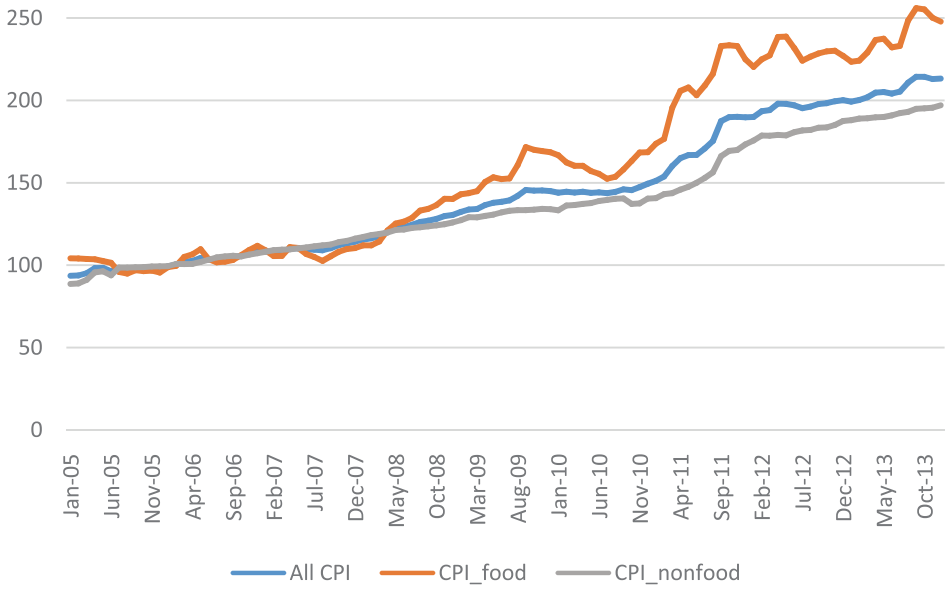


Figure A 2: Monthly CPI trends (2005/6 prices)



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Plot 51, Pool Road, Makerere University Campus
P.O. Box 7841, Kampala, Uganda
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